

表 7.4.9 1990 年至 2022 年一般事業廢棄物焚化處理之二氧化碳與氧化亞氮排放量

| 年份   | 一般<br>事業<br>廢棄物<br>焚化量 | 分類    |       |       |        |          |       |          |        | 礦物碳<br>比例<br>(FCF) | 焚化爐<br>燃燒<br>效率<br>(OF) | 二氧化碳<br>排放量          | 氧化亞氮<br>排放係數         | 氧化亞氮<br>排放量          |
|------|------------------------|-------|-------|-------|--------|----------|-------|----------|--------|--------------------|-------------------------|----------------------|----------------------|----------------------|
|      |                        | 食品    | 纖維布   | 木頭    | 紙      | 石油<br>化學 | 橡膠    | 營造<br>拆除 | 其他     |                    |                         |                      |                      |                      |
|      | 千公噸                    | % %   |       |       |        |          |       |          |        | %                  | %                       | kt CO <sub>2</sub> e | g N <sub>2</sub> O/T | kt CO <sub>2</sub> e |
| 1990 | 77.7                   | 0.00% | 0.55% | 0.74% | 15.68% | 40.66%   | 0.16% | 0.07%    | 42.13% | 34.08%             | 100%                    | 85.73                | 47                   | 0.85                 |
| 1991 | 28.8                   | 0.00% | 0.55% | 0.74% | 15.68% | 40.66%   | 0.16% | 0.07%    | 42.13% | 34.08%             | 100%                    | 31.80                | 47                   | 0.32                 |
| 1992 | 255.4                  | 0.00% | 0.55% | 0.74% | 15.68% | 40.66%   | 0.16% | 0.07%    | 42.13% | 34.08%             | 100%                    | 281.62               | 47                   | 2.81                 |
| 1993 | 249.0                  | 0.00% | 0.55% | 0.74% | 15.68% | 40.66%   | 0.16% | 0.07%    | 42.13% | 34.08%             | 100%                    | 274.62               | 47                   | 2.74                 |
| 1994 | 412.5                  | 0.00% | 0.55% | 0.74% | 15.68% | 40.66%   | 0.16% | 0.07%    | 42.13% | 34.08%             | 100%                    | 454.90               | 47                   | 4.53                 |
| 1995 | 1,301.0                | 0.00% | 0.55% | 0.74% | 15.68% | 40.66%   | 0.16% | 0.07%    | 42.13% | 34.08%             | 100%                    | 1,434.64             | 47                   | 14.30                |
| 1996 | 1,364.6                | 0.00% | 0.55% | 0.74% | 15.68% | 40.66%   | 0.16% | 0.07%    | 42.13% | 34.08%             | 100%                    | 1,504.77             | 47                   | 15.00                |
| 1997 | 272.3                  | 0.00% | 0.55% | 0.74% | 15.68% | 40.66%   | 0.16% | 0.07%    | 42.13% | 34.08%             | 100%                    | 300.29               | 47                   | 2.99                 |
| 1998 | 405.7                  | 0.00% | 0.55% | 0.74% | 15.68% | 40.66%   | 0.16% | 0.07%    | 42.13% | 34.08%             | 100%                    | 447.40               | 47                   | 4.46                 |
| 1999 | 231.5                  | 0.00% | 0.55% | 0.74% | 15.68% | 40.66%   | 0.16% | 0.07%    | 42.13% | 34.08%             | 100%                    | 255.29               | 47                   | 2.54                 |
| 2000 | 570.1                  | 0.00% | 0.55% | 0.74% | 15.68% | 40.66%   | 0.16% | 0.07%    | 42.13% | 34.08%             | 100%                    | 628.64               | 47                   | 6.27                 |
| 2001 | 2,144.6                | 0.00% | 0.55% | 0.74% | 15.68% | 40.66%   | 0.16% | 0.07%    | 42.13% | 34.08%             | 100%                    | 2,364.84             | 47                   | 23.57                |
| 2002 | 1,878.9                | 0.00% | 0.55% | 0.74% | 15.68% | 40.66%   | 0.16% | 0.07%    | 42.13% | 34.08%             | 100%                    | 2,071.98             | 47                   | 20.65                |
| 2003 | 1,703.6                | 0.00% | 0.55% | 0.74% | 15.68% | 40.66%   | 0.16% | 0.07%    | 42.13% | 34.08%             | 100%                    | 1,880.16             | 47                   | 18.74                |
| 2004 | 1,648.3                | 0.00% | 0.55% | 0.74% | 15.68% | 40.66%   | 0.16% | 0.07%    | 42.13% | 34.08%             | 100%                    | 1,817.54             | 47                   | 18.12                |
| 2005 | 1,956.1                | 0.00% | 0.55% | 0.74% | 15.68% | 40.66%   | 0.16% | 0.07%    | 42.13% | 34.08%             | 100%                    | 706.99               | 47                   | 7.05                 |
| 2006 | 2,174.6                | 0.00% | 0.55% | 0.74% | 15.68% | 40.66%   | 0.16% | 0.07%    | 42.13% | 34.08%             | 100%                    | 772.60               | 47                   | 7.70                 |
| 2007 | 2,121.7                | 0.00% | 0.55% | 0.74% | 15.68% | 40.66%   | 0.16% | 0.07%    | 42.13% | 34.08%             | 100%                    | 762.24               | 47                   | 7.60                 |
| 2008 | 1,470.6                | 0.00% | 0.55% | 0.74% | 15.68% | 40.66%   | 0.16% | 0.07%    | 42.13% | 34.08%             | 100%                    | 667.13               | 47                   | 6.65                 |
| 2009 | 614.5                  | 0.00% | 0.55% | 0.74% | 15.68% | 40.66%   | 0.16% | 0.07%    | 42.13% | 34.08%             | 100%                    | 640.37               | 47                   | 6.38                 |
| 2010 | 773.0                  | 0.00% | 0.55% | 0.74% | 15.68% | 40.66%   | 0.16% | 0.07%    | 42.13% | 34.08%             | 100%                    | 679.92               | 47                   | 6.78                 |
| 2011 | 660.2                  | 0.00% | 0.54% | 0.48% | 16.96% | 32.58%   | 0.92% | 0.04%    | 48.48% | 27.94%             | 100%                    | 613.71               | 47                   | 7.46                 |
| 2012 | 616.9                  | 0.00% | 0.54% | 0.69% | 17.77% | 34.78%   | 0.22% | 0.05%    | 45.94% | 29.52%             | 100%                    | 601.00               | 47                   | 6.92                 |
| 2013 | 629.4                  | 0.00% | 0.39% | 0.91% | 17.26% | 44.11%   | 0.03% | 0.01%    | 37.29% | 36.65%             | 100%                    | 758.02               | 47                   | 7.03                 |
| 2014 | 624.1                  | 0.00% | 0.47% | 0.91% | 18.32% | 39.58%   | 0.10% | 0.02%    | 40.61% | 33.16%             | 100%                    | 702.33               | 47                   | 7.19                 |
| 2015 | 434.1                  | 0.00% | 0.52% | 0.84% | 19.52% | 38.53%   | 0.08% | 0.01%    | 40.50% | 32.33%             | 100%                    | 442.29               | 47                   | 4.65                 |
| 2016 | 480.3                  | 0.00% | 0.49% | 0.79% | 15.34% | 40.95%   | 0.06% | 0.05%    | 42.32% | 34.28%             | 100%                    | 551.31               | 47                   | 5.46                 |
| 2017 | 471.9                  | 0.00% | 0.56% | 0.68% | 13.50% | 44.36%   | 0.07% | 0.00%    | 40.81% | 36.95%             | 100%                    | 558.94               | 47                   | 5.14                 |
| 2018 | 488.9                  | 0.00% | 0.63% | 0.80% | 14.85% | 44.45%   | 0.07% | 0.01%    | 39.19% | 37.00%             | 100%                    | 582.72               | 47                   | 5.35                 |
| 2019 | 570.4                  | 0.00% | 0.56% | 0.64% | 14.08% | 41.65%   | 0.05% | 0.29%    | 42.74% | 34.90%             | 100%                    | 633.88               | 47                   | 6.17                 |
| 2020 | 654.1                  | 0.00% | 0.68% | 0.68% | 14.63% | 41.35%   | 0.11% | 0.14%    | 42.42% | 34.65%             | 100%                    | 702.46               | 47                   | 6.89                 |
| 2021 | 696.2                  | 0.00% | 0.69% | 0.70% | 10.27% | 44.93%   | 0.09% | 0.18%    | 43.14% | 37.50%             | 100%                    | 802.81               | 47                   | 7.27                 |
| 2022 | 575.6                  | 0.00% | 0.69% | 0.70% | 10.48% | 44.71%   | 0.09% | 0.18%    | 43.15% | 37.33%             | 100%                    | 787.79               | 47                   | 7.17                 |

資料來源：1. 1990 年至 2004 年活動數據採用統計年報計算而得（一般廢棄物 + 一般事業業廢棄物 - 大型焚化爐焚化量），環境部中華民國環境保護統計年報，2023 年。  
 2. 2005 年至 2010 年活動數據採用環境部「事業廢棄物申報及管理資訊系統」中，焚化處理聯單申報之一般事業廢棄物送至中小型焚化爐處理量並參考 2011 年至 2022 年環境部「固定污染源空污費暨排放量申報整合管理系統」中，無能源回收之中小型焚化爐廢棄物焚化量平均調整 1.1 倍。  
 3. 2011 年後則直接採用環境部「固定污染源空污費暨排放量申報整合管理系統」中，無能源回收之中小型焚化爐廢棄物焚化量作為活動數據。